

WHAT IS CLAIMED IS:

1. A rugged computing module comprising:

a microcontroller;

flash memory, the flash memory being operatively coupled to the microcontroller, at least a portion of the flash memory being adapted for use as a substitute for disk drive storage area, thereby eliminating moving parts in the computing module; and

at least one interface port, the at least one interface port being operatively coupled to the microcontroller, the at least one interface port including at least one of an Ethernet port, a Universal Serial Bus (USB) port, a serial port, a parallel port, a keyboard/mouse port, a Super Video Graphics Array (SVGA) port, an Infrared (IR) port, a Bluetooth port, and a wireless port.

2. A rugged computing module as defined by Claim 1, further comprising dynamic random access memory (RAM), the dynamic RAM being operatively coupled to the microcontroller, the dynamic RAM being used as volatile storage area for data and variables.

3. A rugged computing module as defined by Claim 1, further comprising an Integrated Development Environment (IDE) channel port, the IDE channel port being operatively coupled to the microcontroller, the IDE channel port being adapted for providing an interface between the computing module and disk drive storage area external to the computing module.

4. A rugged computing module as defined by Claim 1, further comprising a housing, the housing substantially enclosing the computing module.

5. A rugged computing module as defined by Claim 4, further comprising a power supply, the power supply being disposed external to the housing.
6. A rugged computing module as defined by Claim 4, wherein the housing substantially restricts airflow to the computing module.
7. A rugged computing module as defined by Claim 4, wherein the housing is adapted to be used as a heat sink for the computing module.
8. A rugged computing module as defined by Claim 4, wherein the housing further comprises a surface area and a volume, the surface area being expressed as $X \text{ units}^2$ and the volume being expressed $Y \text{ units}^3$, X being greater than Y .
9. A rugged computing module as defined by Claim 1, further comprising at least one bracket, the at least one bracket being adapted for mounting the computing module.
10. A rugged computing module as defined by Claim 1, further comprising a real time clock circuit, the real time clock circuit being operatively coupled to the microcontroller, the real time clock circuit adapted to provide a time of day.
11. A rugged computing module as defined by Claim 1, wherein the microcontroller is operatively coupled to a clock signal, the clock signal having a frequency that determines a speed at which the microcontroller operates, the frequency of the clock signal being adapted to satisfy a minimum requirement of an application.
12. A rugged computing module as defined by Claim 1, wherein a quantity of flash memory is selected to satisfy a minimum requirement of an application.
13. A rugged computing module as defined by Claim 1, wherein the computing module is adapted for use in at least one of a point-of-sale (POS) application, restaurant application, a workstation application, automatic identification application, factory automation application, health care application, patient monitoring application, airline counter ticketing application, and tracking application.

14. A rugged computing module as defined by Claim 1, wherein the computing module is adapted for use in industrial applications.

15. A rugged computing module comprising:

a microcontroller, the microcontroller being operatively coupled to a clock signal, the clock signal having a frequency that determines a speed at which the microcontroller operates, the frequency of the clock signal being adapted to satisfy a minimum requirement of an application;

flash memory, the flash memory being operatively coupled to the microcontroller, at least a portion of the flash memory being adapted for use as a substitute for disk drive storage area, thereby eliminating moving parts in the computing module, a quantity of the flash memory being selected to satisfy a minimum requirement of an application;

at least one interface port, the at least one interface port being operatively coupled to the microcontroller, the at least one interface port including at least one of an Ethernet port, a Universal Serial Bus (USB) port, a serial port, a parallel port, a keyboard/mouse port, a Super Video Graphics Array (SVGA) port, an Infrared (IR) port, a Bluetooth port, and a wireless port; and

a housing, the housing substantially enclosing the computing module, the housing being adapted to provide a heat sink for the computing module.